ABSTRACT OF THE DISCLOSURE

The power efficiency of a transmitter is optimized through control of a selected aspect of the transmitter, for instance, a parameter of a power amplifier within the transmitter. The control of the aspect is based on a generated indication of desired average transmitted power. Based on this indication, a hardware path produces a first adjustment signal and a software path produces a second adjustment value, where the second adjustment value has been previously determined to correspond to the particular indication of desired average transmitted power through calibration. A difference between a first adjustment value, which is based on the first adjustment signal, and the second adjustment value is used to produce a correction signal, which is used to alter the first adjustment signal and produce a signal to control the selected aspect of the transmitter.